

**February 10, 2010**

**To: Providers of Broadband Services in Indiana**

**Subject: Information Request in Compliance with the State Broadband Data and Development Grant Program and the Broadband Data Improvement Act**

**This data request is intended only for commercial or public providers of broadband service in Indiana.** The National Telecommunications and Information Administration (NTIA) has issued the State Broadband Data and Development Grant Program Notice of Funds Availability, Docket No. 0660- ZA (July 8, 2009) (NOFA), which defines broadband as follows:

...two-way data transmission to and from the Internet with advertised speeds of at least 768 kilobits per second (kbps) downstream and at least 200 kbps upstream to end users, or providing sufficient capacity in a middle mile project to support the provision of broadband service to end users...

The Indiana Office of Technology (IOT) has been designated by Governor Daniels as the single Indiana entity eligible to receive a grant under the Broadband Data Improvement Act of 2008 (BDIA), 47 U.S.C. §§ 1301-04. IOT has applied for and has been awarded this grant by the NTIA.

Pursuant to the BDIA and the NOFA, IOT must collect certain data regarding the availability of broadband services, the technology used to provide service, the speed of the service, and the location of certain broadband infrastructure. IOT is required to provide the data we collect to the NTIA. We are therefore requesting that entities that provide broadband service, as defined above, on either a commercial or public basis within Indiana, provide these data to IOT in a format consistent with the requirements of NTIA. These formats are described in Attachment A, Data Submission Specification.

The NOFA with its Technical Appendix and the NTIA Mapping Clarification specify the broadband availability information IOT is required to collect. Every broadband service provider within the state of Indiana is requested to provide the information specified to IOT in the format specified in the Attachment A, Data Submission Specification. Please note that the Technical Appendix provides for the production of information that differs by wireline versus wireless providers, and gives wireline providers various filing options, as described below.

Each of these guiding documents is available from IOT at <http://www.in.gov/iot/> under Geographic Information Office (upper left of page).

In order to initiate this process, we are requesting that each broadband provider complete and return the information form included as Attachment B, Broadband Service Provider Response Form by March 12, 2010 to Jim Sparks, Indiana Office of Technology, 100 North Senate Avenue, Indiana Government Center N551, Indianapolis, IN 46204. The form requests the following information:

- Confirmation that your organization is a facilities-based provider of broadband services within Indiana.
- Identification of appropriate executive and technical contacts within your organization.
- An indication that your organization will be willing and able to provide the requested data within 30 days of returning of the form to IOT.
- Any additional questions relating to the Program or IOT's proposed process.

**Wireline Broadband Service Providers:** Originally, the Technical Appendix required the production of broadband availability data at the street address level, requiring wireline broadband service providers to list each address in their service area where wireline broadband service is available (Attachment A, Table 1). In the NTIA Mapping Clarification, however, the NTIA gave providers the option of producing data on a less detailed basis, with different formats, depending on the size of census blocks being offered service.

For those providers who wish to submit availability data by census block, as described in the NTIA Mapping Clarification, we have attached two new record formats -- the first is for census blocks no greater than 2 square miles. In this record format (Attachment A, Table 2) providers need only indicate the individual census block that is served, plus speed and technology information for that block. Under the terms of the program, providers are requested to submit one record format for reporting each census block in which broadband service is offered. The second record format is for reporting service in census blocks larger than 2 square miles. In this record format (Attachment A, Table 3) providers are requested to indicate each street segment offered service within their service area. Providers must submit one record format for each street segment offered service within its service territory.

In addition, wireline broadband providers are also requested to provide data regarding the Maximum Advertised Downstream Speed and Maximum Advertised Upstream Speed across their service areas or local franchise areas by Metropolitan or Rural Statistical Area. These data should be submitted for each of these areas via the form titled "Record Format for Maximum Advertised Speeds by Metropolitan or Rural Statistical Area." (Attachment A, Table 4).

Because submitting broadband data in the manner allowed by the Clarification requires the provider to perform analysis to determine the size of each census block in a provider's service area and identify the individual census block number for each of those blocks, wireline broadband providers may wish to submit availability data using the street level method described in section 1(a) of the Technical Appendix. That section includes a preferred record format for this type of data. For more information on these requirements, wireline broadband service providers should refer to section 1(a) of the Technical Appendix and the corresponding language for this section located in the Clarification, at page 2.

**Wireless Broadband Service Providers:** Wireless providers should refer to section 1(b) of the Technical Appendix and the corresponding language for this section located in the Clarification, at page 2. Note that the Clarification states the following: "With respect to the 'Availability Area Shapefile Details,' item 4 will be satisfied if each polygon indicates the subscriber broadband service authorized maximum downstream and upstream speed available." Item 4 can be found on page 6 of the Technical Appendix. The format for this data is provided in Attachment A, Table 5.

**Other Required Data:** All broadband providers should note that the Clarification amends other requirements set forth in the Technical Appendix. Providers are no longer required to submit information regarding average revenue per end user; however, all remaining conditions of section 2(a) of the technical appendix must be satisfied, provided that such data may be reported across a provider's service or local franchise area, by Metropolitan or Rural Statistical Area. Further, last-mile connection points need not be reported. All other data requested in the Technical Appendix not specifically addressed in this Information Request or the Clarification must be provided to IOT. Providers should refer to sections 2(a) and 3(a) of the Technical Appendix as well as the corresponding language for these sections located in the Clarification, at pages 2 – 3, and Attachment A, Tables 6, 7, and 8.

Data submitted to IOT in response to this request may be protected under the confidentiality requirements set forth in the attached Non Disclosure Agreement (Indiana Broadband NDA) if desired by broadband providers. IOT believes that these provisions will adequately protect the information that is confidential and submitted by broadband providers pursuant to this request and intends to enter into a nondisclosure agreement with any provider that wishes to do so.

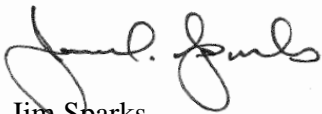
If you have any questions about completing Attachment B, please contact Jim Sparks, Indiana Office of Technology at (317) 234-5889 or [jsparks@iot.in.gov](mailto:jsparks@iot.in.gov). In addition, if you are a provider of broadband services within the scope of the Program, please execute and return the NDA with the form. If you have any questions concerning the NDA, please contact Susan Gard, IOT Legal Counsel, at [susan.gard@atg.in.gov](mailto:susan.gard@atg.in.gov).

If you have questions about this request, contact Jim sparks by email at [jsparks@iot.in.gov](mailto:jsparks@iot.in.gov).

Additional information may be obtained from <http://www.ntia.doc.gov/broadbandgrants/>.

We appreciate your cooperation to help us create a complete and accurate map of broadband service availability in Indiana.

Sincerely,



Jim Sparks  
Geographic Information Officer  
Indiana Office of Technology

Attachments:

- Attachment A, Data Submission Specification
- Attachment B, Broadband Service Provider Response Form

Note: All guiding documents referenced in this request are available at <http://www.in.gov/iot/> under Geographic Information Office (upper left of page), including:

- This document, Broadband Information Request
- Attachment A, Data Submission Specification
- Attachment B, Broadband Service Provider Response Form
- Indiana Broadband NDA
- State Broadband Data and Development Grant Program Notice of Funds Availability (NOFA)
- NTIA Mapping Clarification
- NTIA Joint Provider Letter

## ATTACHMENT A, DATA SUBMISSION SPECIFICATION

*February 10, 2010*

This document provides data specifications and delivery options for Indiana's Broadband Mapping Program which is taking place as part of the nationwide NTIA Broadband Data and Development Program. The Broadband Mapping team is available to discuss variations that may be more suitable for specific broadband service providers, and will seek to accommodate your organization's needs wherever possible. We welcome your questions or comments. Direct your questions or comments to Jim Sparks, (317) 234-5889, [jsparks@iot.in.gov](mailto:jsparks@iot.in.gov).

### Overview

Under this national program, broadband service providers are required to provide information regarding the availability and delivery of broadband services if their company or organization:

- Offers broadband services to end users in Indiana, or could do so within a typical service interval (7 to 10 business days) without extraordinary effort, or
- Owns facilities in Indiana that make possible the delivery of broadband services by other companies meeting the description above.

For the purposes of this Program, the following definitions are being used:

- "Broadband service" is the provision, on either a commercial or noncommercial basis, of data transmission technology that provides data transmission to and from the Internet with advertised speeds of at least 768 kilobits per second (kbps) downstream, and greater than 200 kbps upstream, to end users.
- An "end user" of broadband service is a residential or business party, institution, or state or local government entity that may use broadband Internet service for its own purposes, and that does not resell such service to other entities or incorporate such service into retail Internet-access services that it provides. (For this purpose, Internet Service Providers {ISPs} are not "end users.")
- A "facilities-based" broadband provider offers service connections to end user locations if the company or organization:
  - (1) Owns the portion of the physical facility that terminates at the end user location
  - (2) Obtains unbundled network elements (UNEs), special access lines or other leased facilities that terminate at the end user location and supplies or equips them as broadband, or
  - (3) Supplies or equips a broadband wireless channel to the end user location over licensed or unlicensed spectrums.
  - (4) Broadband service is "available" at an address if the provider offers, or could offer within a typical service interval (7 to 10 business days) without an extraordinary commitment of resources, data transmission to and from the Internet with advertised speeds of at least 768 kbps downstream, and greater than 200 kbps upstream, to end-users at that address.

## Submission Options

Data submission options and the type of data required vary based on the type of service provider:

1. **For Wireline Services to specific end user locations** you may report availability and service characteristics by any of the following:
  - a. Specific Address
  - b. Street Segment – using US Census 2009 TIGER/Line Files ([www.census.gov/geo/www/tiger/](http://www.census.gov/geo/www/tiger/))
  - c. Census Block (using the “current” version on the US Census website - [www.census.gov](http://www.census.gov))
  - d. *Census blocks larger than two square miles in area* must be reported either by Specific Address or by Street Segment as described above. Please note that in all cases, wireline broadband availability will be aggregated to Census Block (for blocks < 2 sq mi) or Street Segment (for blocks > 2 sq mi) as per the NTIA specifications, and in no case will specific address data be transmitted to NTIA or included in the Indiana or federal broadband map.
2. **For Wireless Services** you may report availability via a Geographic Information System (GIS) - compatible format depicting the areas in which your company or organization’s services are available to end users. The Indiana Broadband Mapping team is able to work with a wide variety of GIS data formats. Please contact us to discuss specific data format issues.
3. **For Middle-mile and/or Backbone Interconnection Points**, please see page 11 of 13, below.

## Service Characteristics and Record Formats

The following Record Format tables describe the minimum required fields to be included with each data submission. Additional fields may be added as needed to accurately describe availability and service characteristics, or to uniquely identify each record.

**Table 1: Record Format for Availability and Service Characteristics**  
**Reported at Address Level (for NTIA deliverable 1.a)**

Field	Description	Type	Example
Provider Name	Provider Name	Text	ABC Co.
DBA Name	“Doing-business-as” name	Text	Superfone, Inc.
FRN	Provider’s FCC Registration Number ( <a href="https://fjallfoss.fcc.gov/coresWeb/publicHome.do">https://fjallfoss.fcc.gov/coresWeb/publicHome.do</a> )	Integer	0048402202
Street Address	Complete street address including Zip Code. <i>Addresses can be reported in separate fields by address components or as one text string as the example to the right illustrates.</i>	Text	2340 W Herrick Road Pine Bush IN 46213
Technology of Transmission	Technology of Transmission available for the provision of service at the address (see Appendix for codes).	Integer	50
Typical Downstream Speed	Speed Tier Code for the downstream data transfer throughput rate that most subscribers to service at the maximum advertised downstream speed (above) can achieve consistently during expected periods of heavy network usage (see Appendix for codes).	Integer	8
Typical Upstream Speed	Speed Tier Code for the upstream data transfer throughput rate that most subscribers to service at the maximum advertised upstream speed (above) can achieve consistently during expected periods of heavy network usage (see Appendix for codes).	Integer	8

Submit your coverage area in a spreadsheet, delimited text, database, or GIS compatible format using this naming convention: IN\_*ProviderSpecificFRN*\_address\_availability.xxx (GIS compatible files must be accompanied by metadata or a plain text “readme” file that contains the coordinate system information.)

**Table 2: Record Format for Availability and Service Characteristics**  
**Reported at Census Block Level (for NTIA deliverable 1.a)**

Field	Description	Type	Example
Provider Name	Provider Name	Text	ABC Co.
DBA Name	“Doing-business-as” name	Text	Superfone, Inc.
FRN	Provider’s FCC Registration Number ( <a href="https://fjallfoss.fcc.gov/coresWeb/publicHome.do">https://fjallfoss.fcc.gov/coresWeb/publicHome.do</a> )	Integer	0048402202
Census Block ID	Numeric identifier for the US Census Block being reported.	15-digit Integer	360010001001000
Technology of Transmission	Technology of Transmission available for the provision of service at the address (see Appendix for codes).	Integer	50
Typical Downstream Speed	Speed Tier Code for the downstream data transfer throughput rate that most subscribers to service at the maximum advertised downstream speed (above) can achieve consistently during expected periods of heavy network usage (see Appendix for codes).	Integer	8
Typical Upstream Speed	Speed Tier Code for the upstream data transfer throughput rate that most subscribers to service at the maximum advertised upstream speed (above) can achieve consistently during expected periods of heavy network usage (see Appendix for codes).	Integer	8

Submit your coverage area in a spreadsheet, delimited text, database, or GIS compatible format using this naming convention: IN\_*ProviderSpecificFRN\_census\_block\_availability*.xxx (GIS compatible files must be accompanied by metadata or a plain text “readme” file that contains the coordinate system information.)

**Table 3: Record Format for Availability and Service Characteristics**  
**Reported at Street Segment Level (for NTIA deliverable 1.a)**

Field	Description	Type	Example
Provider Name	Provider Name	Text	ABC Co.
DBA Name	“Doing-business-as” name	Text	Superfone, Inc.
FRN	Provider’s FCC Registration Number ( <a href="https://fjallfoss.fcc.gov/coresWeb/publicHome.do">https://fjallfoss.fcc.gov/coresWeb/publicHome.do</a> )	Integer	0048402202
Street Name	Complete street name.	Text	W Herrick Road
Street Segment ID	Unique identifier for the US Census Bureau’s <i>TIGER/Line Files</i>	Integer	<i>TIGER</i> : 221835907
Technology of Transmission	Technology of Transmission available for the provision of service at the address (see Appendix for codes).	Integer	50
Typical Downstream Speed	Speed Tier Code for the downstream data transfer throughput rate that most <i>typical</i> subscribers to service at the maximum advertised downstream speed (above) can achieve consistently during expected periods of heavy network usage (see Appendix for codes).	Integer	8
Typical Upstream Speed	Speed Tier Code for the upstream data transfer throughput rate that most subscribers to service at the maximum advertised upstream speed (above) can achieve consistently during expected periods of heavy network usage (see Appendix for codes).	Integer	8

Submit your coverage area in a spreadsheet, delimited text, database, or GIS compatible format using this naming convention: IN\_*ProviderSpecificFRN\_street\_segment\_availability*.xxx (GIS compatible files must be accompanied by metadata or a plain text “readme” file that contains the coordinate system information.)



**Table 4: Record Format for Wireline Maximum Advertised Speeds  
Reported at Cellular Market Area Level (for NTIA deliverable 1.a)**

Field	Description	Type	Example
Provider Name	Provider Name	Text	ABC Co.
DBA Name	“Doing-business-as” name	Text	Superfone, Inc.
FRN	Provider’s FCC Registration Number ( <a href="https://fjallfoss.fcc.gov/coresWeb/publicHome.do">https://fjallfoss.fcc.gov/coresWeb/publicHome.do</a> )	Integer	48402202
Cellular Market Area	Report using MSA/RSA boundaries and associated codes available for download at <a href="http://wireless.fcc.gov/geographic/index.htm?job=market_boundary_files">http://wireless.fcc.gov/geographic/index.htm?job=market_boundary_files</a> .	Integer	562
Maximum Advertised Downstream Speed	Speed Tier Code for the maximum advertised downstream speeds available within each CMA (see Appendix for codes).	Integer	8
Maximum Advertised Upstream Speed	Speed Tier Code for the maximum advertised upstream speed available within each CMA (see Appendix for codes).	Integer	8

Submit your coverage area in a spreadsheet, delimited text, database, or GIS compatible format using this naming convention: IN\_*ProviderSpecificFRN\_CMA*\_advertised.xxx (GIS compatible files must be accompanied by metadata or a plain text “readme” file that contains the coordinate system information.)

**Table 5: Record Format for Availability and Service Characteristics  
Reported in Connection with Wireless Services (for NTIA deliverable 1.b)**

Field	Description	Type	Example
Provider Name	Provider Name	Text	ABC Co.
DBA Name	“Doing-business-as” name	Text	Superfone, Inc.
FRN	Provider’s FCC Registration Number ( <a href="https://fjallfoss.fcc.gov/coresWeb/publicHome.do">https://fjallfoss.fcc.gov/coresWeb/publicHome.do</a> )	Integer	0048402202
Technology of Transmission	Technology of Transmission for the provision of service at the address (see Appendix for codes).	Integer	41
Spectrum 1	If technology of transmission is Wireless, is Cellular Spectrum (824-849 MHz; 862-869 MHz) used to provide service? (Y/N)	Text	Y
Spectrum 2	If technology of transmission is Wireless, is 700 MHz Spectrum (698-758 MHz; 775-788 MHz; 805-806 MHz) used to provide service? (Y/N)	Text	Y
Spectrum 3	If technology of transmission is Wireless, is Broadband Personal Communications Services Spectrum (1850-1915 MHz; 1930-1995 MHz) used to provide service? (Y/N)	Text	Y
Spectrum 4	If technology of transmission is Wireless, is Advanced Wireless Services Spectrum (1710-1755 MHz; 2100-2155 MHz) used to provide service? (Y/N)	Text	N
Spectrum 5	If technology of transmission is Wireless, is Broadband Radio Service/Educational Broadband Service Spectrum (2496-2690 MHz) used to provide service? (Y/N)	Text	N
Spectrum 6	If technology of transmission is Wireless, is Unlicensed (including broadcast television “white spaces”) Spectrum used to provide service? (Y/N)	Text	N
Spectrum 7	If technology of transmission is Wireless, but the spectrum used to provide services is not listed above, please identify as one of the following: <i>Specialized Mobile Radio (SMR)</i> Service (817-824 MHz; 862-869 MHz; 896-901 MHz; 935-940 MHz), <i>Wireless Communications Service (WCS)</i> spectrum (2305-2320 MHz; 2345-2360 MHz, 3650-3700 MHz), <i>Satellite</i> (L-band, big LEO, Little LEO, 2 GHz).	Text	SMR
Maximum Advertised Downstream Speed	Speed Tier Code for the maximum advertised downstream speeds available within each polygon within a service area or local franchise area. (See Appendix for codes.)	Integer	8
Maximum Advertised Upstream Speed	Speed Tier Code for the maximum advertised upstream speeds within each polygon within a service area or local franchise area. (See Appendix for codes.)	Integer	8
Typical Downstream Speed	Speed Tier Code for the downstream data transfer throughput rate that most subscribers to service at the maximum advertised downstream speed (above) can achieve consistently during expected periods of heavy network usage (see Appendix for codes).	Integer	8
Typical Upstream Speed	Speed Tier Code for the upstream data transfer throughput rate that most subscribers to service at the maximum advertised upstream speed (above) can achieve consistently during expected periods of heavy network usage (see Appendix for codes).	Integer	8

**Additional Information for Table 5:**

1. Submit your coverage area in a GIS compatible format using the naming convention:  
IN\_*ProviderSpecificFRN*\_wireless\_availability.xxx
2. All map areas must be closed, non-overlapping polygons with a single, unique identifier.
3. Any variation in any of the required fields necessitates the creation of a separate closed, non-overlapping polygon.

In cases where unlicensed frequencies are being reported, specify the **frequency** as text in the last field (“Spectrum Used”).

4. GIS compatible files must be accompanied by metadata or a plain text “readme” file that contains a comprehensive explanation of the methodology employed to generate the map layer including coordinate system information, any necessary assumptions, and an assessment of the accuracy of the finished product.

**Table 6: Record Format for Subscriber-Weighted Nominal Speed  
in Provider’s Service Area or Local Franchise Area (for NTIA deliverable 2.a)**

Field	Description	Type	Example
Provider Name	Provider Name	Text	ABC Co.
DBA Name	“Doing-business-as” name	Text	Superfone, Inc.
FRN	Provider’s FCC Registration Number ( <a href="https://fjallfoss.fcc.gov/coresWeb/publicHome.do">https://fjallfoss.fcc.gov/coresWeb/publicHome.do</a> )	Integer	0048402202
Cellular Market Area	Report using MSA/RSA boundaries and associated codes available for download at <a href="http://wireless.fcc.gov/geographic/index.htm?job=market_boundary_files">http://wireless.fcc.gov/geographic/index.htm?job=market_boundary_files</a> .	Integer	562
Technology of Transmission	Technology of Transmission used in the provision of service (see Appendix for codes).	Integer	2
Subscriber-Weighted Nominal Speed	Subscriber-weighted nominal speed (blended average rate in kbps). (See information below.)	Float	2753.3

Submit your data in a spreadsheet, delimited text, database, or GIS compatible format using this naming convention: IN\_*ProviderSpecificFRN*\_subscriber\_weighted\_nominal\_speed.xxx (GIS compatible files must be accompanied by metadata or a plain text “readme” file that contains the coordinate system information.)

A provider's **Subscriber-Weighted Nominal Speed** (in kbps) should be calculated as *the sum of the products of the provider's advertised maximum download data transmission rate (in kbps) for each residential rate tier advertised by the provider in the Metropolitan Statistical Area (MSA) or Rural Statistical Area (RSA), times the average monthly number of residential subscribers receiving the advertised download transmission rate tier for the relevant reporting month (i.e., June or December, as applicable), divided by the average total number of residential subscribers for all the included data transmission rate tiers in the county for that month.*

This is expressed in the following formula:

$$\frac{(\text{speed tier-1 in kbps} \times \text{no. of tier-1 subscribers}) + (\text{speed tier-2 in kbps} \times \text{no. of tier-2 subscribers}) + \dots}{\text{total average monthly subscribers}}$$

For example, if the provider offers two tiers of service with advertised maximum download speeds of 1500 kbps to 1000 customers and 6000 kbps to 500 customers, *calculate the product of 1500 kbps times the average monthly number of residential subscribers (1000) to the 1500 kbps speed tier, plus the product of 6000 kbps times the average monthly number of residential subscribers to the 6000 kbps speed tier (500) and divide the sum by the sum (or total) of the average monthly number of residential subscribers in both tiers:*

$$\frac{(\text{1500 kbps} \times \text{1000 subscribers}) + (\text{6000 kbps} \times \text{500 subscribers})}{\text{1500}}$$

$$\text{Subscriber-Weighted Nominal Speed} = 3000 \text{ kbps}$$

### **Middle-mile and Backbone Interconnection Points**

Middle-mile and Backbone Interconnection Points typically enable relatively fast data rates, are built to handle substantial capacities, and may be service-quality assured.

Examples might include points of interconnection enabling communications between:

- An incumbent local exchange carrier central office and the Internet
- A cable aggregation point (headend) and the Internet, or between
- A wireless base station and the provider's core network elements that connect to other networks including the Internet.

Middle-mile and Backbone Interconnection Point information should focus on the connectivity at a point. That is, if a point at which network elements or segments are joined would not reasonably offer the possibility of technical connectivity with the network[s], it should not be reported.

Providers must submit a list of Interconnection Points of facilities that provide connectivity between:

- a) a service provider's network elements (or segments) or
- b) a service provider's network and another provider's network, including the Internet backbone.

Collectively, (a) and (b) are "middle-mile and backbone interconnection points."

Middle-mile and Backbone Interconnection Points data may be submitted as a tabular list (for example, a Microsoft Excel file) or as a GIS compatible file. GIS compatible files must be accompanied by metadata or a plain text “read me” file that contains a comprehensive explanation of the methodology employed to generate the map layer including coordinate system information, any necessary assumptions, and an assessment of the accuracy of the finished product.

If geographic coordinates of the points are not known, we can determine them for you as long as you provide a sufficient location description, such as street address or distance from street intersections or other landmarks that can be located on a map.

**Table 7: Record Format for Middle-mile and Backbone Interconnection Points Data for Each Provider (for NTIA deliverable 3.b)**

Field	Description	Type	Example
Provider Name	Provider Name	Text	ABC Co.
DBA Name	“Doing-business-as” name	Text	Superfone, Inc.
FRN	Provider’s FCC Registration Number ( <a href="https://fjallfoss.fcc.gov/coresWeb/publicHome.do">https://fjallfoss.fcc.gov/coresWeb/publicHome.do</a> )	Integer	0048402202
Ownership	Is the facility owned (0) or leased (1)?	Integer	0
Serving Facility Capacity	Serving Facility Code (see Table 7)	Integer	1
Serving Facility Type	Type of transport facility (1=Fiber, 2=Copper, 3=Hybrid Fiber Coax {HFC}, 4=Wireless) (See codes below.)	Integer	1
Latitude	Latitude in decimal degrees (a minimum of 4 digits to the right of the decimal is required)	Float	42.65260
Longitude	Longitude in decimal degrees (a minimum of 4 digits to the right of the decimal is required)	Float	-73.75733
Street Address  (if unable to provide coordinate data)	Complete street address including Zip Code. <i>Addresses can be reported in separate fields by address components or as one text string as the example to the right illustrates.</i>	Text	2340 W Herrick Road  Pine Bush IN 46219
Elevation	Elevation relative to grade to the nearest foot. (Positive integers indicate above-grade, negative indicate below-grade.) (See details below.)	Integer	-10

Submit your coverage area in a spreadsheet, delimited text, database, or GIS compatible format using the naming convention: IN\_*ProviderSpecific*FRN\_Middle\_Mile.xxx

**Serving Facility Codes**

Express the serving facility’s capacity as currently configured:

<b>Data Rate Code</b>	<b>Interconnection Point Data Rate</b>
1	Multiple T1s and less than 40 mbps
2	Greater than 40 mbps and less than 150 mbps
3	Greater than 150 mbps and less than 600 mbps
4	Greater than or equal to 600 mbps and less than 2.4 gbps
5	Greater than or equal to 2.4 gbps and less than 10 gbps
6	Greater than or equal to 10 gbps

**Elevation** pertains to whether interconnection points are in vaults below grade (i.e., manhole accessible), in interconnection hotels (above grade), or as part of aerial plant (well above grade). Providers should report the elevation of the point of connectivity, which will usually be zero for towers constructed on the ground. Providers should use reasonable efforts to provide accurate elevation data.

## Provider Footprint

Though not specifically required by the NTIA, we request that wireline and wireless service providers supply a GIS compatible data file that identifies your company or organization's entire service area. Cable providers may alternatively supply a list of municipalities for which your company has franchise agreements to offer service. Provider footprints will be highly beneficial for data validation, independent speed test sampling, and other relevant uses. Alternatively, provider footprints can be conveyed to IOT via hardcopy maps. The Indiana Broadband Mapping team will digitize those maps to meet the needs of the program.

If requested, the Broadband Mapping team will send you a hardcopy map of your general service area that can be marked up and returned. Please contact us if you would like a hardcopy sent to your company or organization.

**Table 8: Record Format for Provider Footprint**

Field	Description	Type	Example
Provider Name	Provider Name	Text	ABC Co.
DBA Name	"Doing-business-as" name	Text	Superfone, Inc.
FRN	Provider's FCC Registration Number ( <a href="https://fjallfoss.fcc.gov/coresWeb/publicHome.do">https://fjallfoss.fcc.gov/coresWeb/publicHome.do</a> )	Integer	0048402202

If you will be submitting information electronically, send your Provider Footprint data in a GIS compatible or spreadsheet format using the naming convention: *IN\_ProviderSpecificFRN\_footprint.xxx* (GIS compatible files must be accompanied by metadata or a plain text "readme" file that contains the coordinate system information.)

## Data Delivery Options

Consistent with the Indiana Broadband Program's commitment to data confidentiality and the Program's Non-Disclosure Agreement, provider data can be submitted to the Indiana Broadband Mapping team via the following methods:

- Secure FTP Site – call for details.
- DVD or CD mailed to:  
Jim Sparks  
100 North Senate Avenue, IGC N551  
Indianapolis, IN 46204

If you need additional information about these options, please contact Jim Sparks at (317) 234-5889 or [jsparks@iot.in.gov](mailto:jsparks@iot.in.gov).

## **Appendix**

**Technology of Transmission Codes:** Report the technology used by the portion of the connection that terminates at the end-user location. If different technologies are used in the two directions of information transfer (“downstream” and “upstream”), report the connection in the technology category for the **downstream** direction.

<b>Technology Code</b>	<b>Description</b>	<b>Details</b>
10	Asymmetric xDSL	
20	Symmetric xDSL	
30	Other Copper Wireline	All copper-wire based technologies other than xDSL (e.g., Ethernet over copper or T-1)
40	Cable Modem – DOCSIS 3.0	
41	Cable Modem – Other	
50	Optical Carrier/Fiber to the End User	Fiber to the home or business (does not include “fiber to the curb”)
60	Satellite	
70	Terrestrial Fixed Wireless – Unlicensed	
71	Terrestrial Fixed Wireless – Licensed	
80	Terrestrial Mobile Wireless	
90	Electric Power Line	
0	All Other	Any specific technology not listed above

**Speed Tier Codes:** Speed tiers should be entered as integers based on the following reference:

<b>Upload Speed Tier</b>	<b>Download Speed Tier</b>	<b>Description</b>
1	--	Less than or equal to 200 kbps
2	--	Greater than 200 kbps and less than 768 kbps
3	3	Greater than or equal to 768 kbps and less than 1.5 mbps
4	4	Greater than or equal to 1.5 mbps and less than 3 mbps
5	5	Greater than or equal to 3 mbps and less than 6 mbps
6	6	Greater than or equal to 6 mbps and less than 10 mbps
7	7	Greater than or equal to 10 mbps and less than 25 mbps
8	8	Greater than or equal to 25 mbps and less than 50 mbps
9	9	Greater than or equal to 50 mbps and less than 100 mbps
10	10	Greater than or equal to 100 mbps and less than 1 gbps
11	11	Greater than or equal to 1 gbps



## **ATTACHMENT B**

### **Broadband Service Provider Response Form**

1. \_\_\_\_\_ [name of organization]

☐ is / ☐ is not a broadband service provider as defined by the NTIA's Notice of Funds Availability and Solicitation of Applications for the Program (74 FR 32545 [July 8, 2009]) and the Clarification published August 12, 2009 (74 CFR 40569 [August 12, 2009]). For this purpose, "broadband" is defined as:

Data transmission technology that provides two-way data transmission to and from the Internet with advertised speeds of at least 768 kilobits per second (kbps) downstream and at least 200 kbps upstream to end users, or providing sufficient capacity in a middle mile project to support the provision of broadband service to end users within the project area.

2. If the organization is a broadband service provider, please provide contact information for: (a) a person who is authorized to act on behalf of the organization; and (b) if different, a person who is familiar with the data maintained by the organization that is responsive to the requirement so the Program.

Contact:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

E-mail: \_\_\_\_\_

Telephone: \_\_\_\_\_

Technical Contact:

☐ Same as above.

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

E-mail: \_\_\_\_\_

Telephone: \_\_\_\_\_

3. Our organization is able and willing to provide broadband service availability data by Census Blocks for Census Blocks smaller than 2 square miles or Road Segments for Census Blocks 2 square miles and larger within 30 days:

- ☐ Yes
- ☐ No
- ☐ Yes, with the following limitations:

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4. Our organization is able and willing to provide data on middle-mile connection points within 30 days:

- ☐ Yes
- ☐ No
- ☐ Yes, with the following limitations:

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5. Additional questions:

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PLEASE E-MAIL THE COMPLETED FORM to [jsparks@iot.in.gov](mailto:jsparks@iot.in.gov) or fax the completed form to (317) 234-5889.